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Table of Contents

Chapter **Page**

Part 1 Algae

Chapter 1 Algae

Normawaty Mohammad-Noor.....2

Chapter 2 Microalgae

Normawaty Mohammad-Noor 7

Chapter 3 Seaweed

Normawaty Mohammad-Noor.....12

Chapter 4 Importance of Algae

Anidha Visvanathan & Normawaty Mohammad-Noor.....17

Chapter 5 Toxic Microalgae

Anidha Visvanathan & Normawaty Mohammad-Noor.....23

Chapter 6 Benthic Dinoflagellates

Anidha Visvanathan & Normawaty Mohammad-Noor.....28

Chapter 7 Diatoms

Anies Aznida Sa'ari & Normawaty Mohammad-Noor.....34

Chapter 8 Techniques to Collect Benthic Dinoflagellates

Anidha Visvanathan & Normawaty Mohammad-Noor.....42

Chapter 9 Techniques to Collect Sand-Dwelling Dinoflagellates

Asilah Al- Has & Normawaty Mohammad-Noor.....47

Chapter 10 Technique to Collect and Determination of Algal Cell Density

Normawaty Mohammad Noor, Anies Aznida Sa'ari & Asilah Al- Has.....53

Chapter 11 Technique to Establish Microalgae into Pure Culture

Normawaty Mohammad-Noor & Mohamad Fuad Mohamad Anuar.....58

Chapter 12 Media for Microalgae Culture

Normawaty Mohammad-Noor & Mohamad Fuad Mohamad Anuar.....63

Chapter 13 Scanning Electron Microscopy

Normawaty Mohammad-Noor & Asilah Al-Has.....69

Chapter 14 Making Seaweed Herbarium

Normawaty Mohammad-Noor.....74

Part 2 Beach Profile and Sediment Characteristics

Chapter 15 Beach Profile

Shahbudin Saad.....80

Chapter 16 Littoral Environmental Observation

Shahbudin Saad.....90

Chapter 17 Grain-Size Analysis

Shahbudin Saad.....97

Part 3 Coral Reef

Chapter 18 Suspended Sediment in Coral Reef Area

Shahbudin Saad.....113

Chapter 19 Line Intercept Transect

Shahbudin Saad.....118

Chapter 20 Coral Recruitment

Shahbudin Saad.....127

Chapter 21 Coral Reef Fish Assemblages

Shahbudin Saad.....132

Chapter 22 Determination of Coral Cover (Coral Lifeforms) in Marine Environment

Mohamed Kamil Abdul Rashid.....137

Part 4 Marine Pollution

Chapter 23 Determination of Aliphatic and Aromatic Hydrocarbons in Marine Environment

Mohamed Kamil Abdul Rashid.....144

Chapter 24 Determination of Dissolved Inorganic Nitrogen (DIN) in Marine Environment.

Mohamed Kamil Abdul Rashid.....151

Chapter 25 Water Sampling Techniques

Anies Aznida Sa'ari, Kamaruzzaman Yunus & Akbar John.....158

Chapter 26 Determination of Fecal Coliform and *Escherichia coli (E. coli)* in Marine Environment

Mohamed Kamil Abdul Rashid.....163

Chapter 27 Determination of Organochlorine Insecticides in Oyster and Marine Sediment

Mohamed Kamil Abdul Rashid.....170

Chapter 28 Detection of Heavy Metals in Sediment and Biological Samples

Anies Aznida Sa'ari, Akbar John & Kamaruzzaman Yunus.....179

Chapter 29 Laboratory Protocols - Sediment Sample Analysis

Anies Aznida Sa'ari., Kamaruzzaman Yunus & Akbar John.....186

Chapter 30 *Anadara granosa* **– A Potential Bioindicator in Coastal Waters of Langkawi Island, Malaysia**

Kamaruzzaman Yunus, Mohd Zahir Md Suhaimi, Fikriah Faudzi, Mohd Fuad Miskon & Akbar John 195

Chapter 31 Bioaccumulation of Selected Metals in Commercially Important Marine Fishes from Selangor Coastal Waters, Malaysia

Kamaruzzaman Yunus., Rina Sharlinda Zabri, Fikriah Faudzi, Mohd Fuad Miskon & Akbar John... 206

Part 5 Fish

Chapter 32 Larval Feeding Behavior and Sensory Organs

Yukinori Mukai.....215

Chapter 33 Procedure of Histological Experiment

Yukinori Mukai.....221

Chapter 23 Determination of Aliphatic and Aromatic Hydrocarbons in Marine Environment

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Introduction

The studies on hydrocarbon components in the aquatic environment are based on the water column, organisms and sediments analyses. Hydrocarbon occurs in petroleum products, oil and grease, natural gases, coal tars and deep Earth gases. Many hydrocarbons are useful as fuels, and use in cooking gas, gasoline, naphtha, benzene, kerosene, paraffin and lubricating oils. There are two main categories of hydrocarbon which are aliphatic and aromatic hydrocarbons.

An aliphatic hydrocarbon is constituted as alkanes, alkenes and alkynes. Their isomers are classified into two which are saturated and unsaturated hydrocarbons based on the bond types between carbon atoms (Solomons & Fryhle, 2000). Alkanes are the types of saturated hydrocarbon that has the maximum possible number of hydrogen atoms and has no double bonds with a general formula $C_n H_{2n+2}$, where n is the number of carbon atom in the molecules. The simplest alkane is methane (CH_4) (Fessenden *et al.*, 1998). At a standard condition, alkanes with fewer than 5 carbons (CH_4 to C_4H_{10}) are gases; alkanes with 5 to 17 carbons (C_5H_{12} to $C_{17}H_{36}$) are liquid; and alkanes with more than 18 carbons (after $C_{18}H_{38}$) are solids and referred to as waxed or paraffin (Wright & Welbourn, 2002). Unsaturated is a term used when any carbon structure contains double or triple bonds such as alkenes and alkynes. Alkenes contain one or more carbon-carbon double bonds, has a general formula $C_n H_{2n}$ and the simplest alkene is ethene (C_2H_4). Alkynes contain one or more carbon-carbon triple bonds with the general formula $C_n H_{2n-2}$ and the simplest alkyne is ethyne (HC≡CH) (Solomons & Fryhle, 2000).